

ACC NR: AP6033179

SOURCE CODE: UR/0079/66/036/010/1830/1834

AUTHOR: Abramov, V. S.; Barabanov, V. I.

ORG: Kazan Veterinary Institute (Kazanskiy veterinarnyy institut)

TITLE: Reactions of phosphonous acids with aldehydes and ketones. Part 27: Esters of ethyl- α -hydroxynitro(fluoro)benzylphosphonic and ethyl(methyl)- α -hydroxy- α -diethoxyphosphonoethylphosphonic acid

SOURCE: Zhurnal obshchey khimii, v. 36, no. 10, 1966, 1830-1834

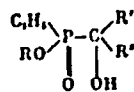
TOPIC TAGS: phosphonic acid, organic phosphorus compound, *aldehyde, ketone, ester*

ABSTRACT: It is shown that incomplete esters of alkylphosphonous acids react in the absence of a catalyst with nitrobenzaldehydes, fluorobenzaldehydes, and 3-chloro-2-butanone to form esters of alkyl- α -hydroxynitrobenzylphosphonic, alkyl- α -hydroxyfluorobenzylphosphonic and alkyl- α -hydroxy-2-chloroisobutylphosphonic acids. Incomplete esters of alkylphosphonous acids react with esters of acetophosphonic acids in the absence of a catalyst to form esters of alkyl- α -hydroxy- α -dialkoxyposphonoethylphosphonic acid, which distills under reduced pressure without decomposition. Their IR spectra show a broad band characteristic of a hydroxyl group bound by a hydrogen bond. Preliminary data show that the synthesized compounds (see Tables 1 and 2) have insecticidal properties and a mitotic effect. Orig. art. has: 1 figure and 2 tables.

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UDC: 547.26'118

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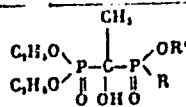
Table 1. Esters of ethyl- α -hydroxynitro(fluoro)-benzylphosphonic acid

Formula	R	R'	R''	(%)	MP (solvent)	d ₄ ²⁰	n _D ²⁰	MR _D	
								measured	calculated
C ₁₃ H ₁₉ NO ₃ P	C ₂ H ₅	H	o-O ₂ NC ₆ H ₄	64	89-90° (benzene)	—	—	—	—
C ₁₃ H ₁₉ NO ₃ P	C ₂ H ₅	H	m-O ₂ NC ₆ H ₄	41	151-152 (acetone)	—	—	—	—
C ₁₃ H ₁₉ NO ₃ P	C ₂ H ₅	H	p-O ₂ NC ₆ H ₄	38	163-164 (")	—	—	—	—
C ₁₃ H ₁₉ NO ₃ P	C ₂ H ₅	H	m-O ₂ NC ₆ H ₄	45	144-145 (")	—	—	—	—
C ₁₂ H ₁₇ NO ₃ P	C ₂ H ₅	H	o-O ₂ NC ₆ H ₄	44	120-121 (benzene)	—	—	—	—
C ₁₁ H ₁₅ ClNO ₃ P	ClC ₂ H ₄	H	o-O ₂ NC ₆ H ₄	21	110-111 (acetone)	—	—	—	—
C ₁₁ H ₁₅ ClNO ₃ P	ClC ₂ H ₄	H	m-O ₂ NC ₆ H ₄	65	128-129 (")	—	—	—	—
C ₁₁ H ₁₅ ClNO ₃ P	ClC ₂ H ₄	H	p-O ₂ NC ₆ H ₄	42	130-131 (")	—	—	—	—
C ₁₅ H ₂₃ NO ₃ P	C ₄ H ₉	H	R-(CH ₂) ₃ NC ₆ H ₄	90	—	1.2670	1.5005	63.68	64.08
C ₁₃ H ₁₉ FO ₃ P	C ₂ H ₅	H	o-FC ₆ H ₄	93	—	1.2700	1.5050	63.71	64.08
C ₁₃ H ₁₉ FO ₃ P	C ₂ H ₅	H	m-FC ₆ H ₄	84	—	1.4450	1.5235	59.37	59.71
C ₁₃ H ₁₉ ClFO ₃ P	ClC ₂ H ₄	H	o-FC ₆ H ₄	96	—	1.4220	1.5145	59.43	59.71
C ₁₁ H ₁₅ ClFO ₃ P	ClC ₂ H ₄	H	m-FC ₆ H ₄	—	—	—	—	—	—
C ₈ H ₁₈ ClO ₃ P	C ₂ H ₅	CH ₃	CH ₃ CHCl	70	—	1.1631 1.1630 *	1.4645 1.4543 *	54.26 54.23	54.76
C ₉ H ₂₀ ClO ₃ P	C ₃ H ₇	CH ₃	CH ₃ CHCl	76	—	1.1230 1.1228 *	1.4605 1.4600 *	59.04 59.20	59.37

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Table 2. Esters of methyl(ethyl)- α -hydroxy- α -dithoxyphosphonoethyl-phosphonic acid



Formula	R	R'	Yield (%)	BP (p in mm)	d_4^{20}	n_D^{20}	NR _D	
							measured	calculated
$\text{C}_8\text{H}_{20}\text{O}_6\text{P}_2$	CH_3	CH_3	22	99–100° (0.1)	1.1710	1.4300	60.44	60.75
$\text{C}_9\text{H}_{22}\text{O}_6\text{P}_2$	CH_3	C_2H_5	34	115–116 (0.1)	1.1611	1.4365	64.96	65.37
$\text{C}_{10}\text{H}_{24}\text{O}_6\text{P}_2$	CH_3	C_3H_7	37	123–124 (0.1)	1.1320	1.4400	70.32	70.00
$\text{C}_{11}\text{H}_{26}\text{O}_6\text{P}_2$	CH_3	C_4H_9	59	141–142 (0.1)	1.1270	1.4425	74.23	74.61
$\text{C}_9\text{H}_{21}\text{ClO}_6\text{P}_2$	CH_3	C_2H_5	68	MP 70–71° (benzene)	—	—	—	—
$\text{C}_9\text{H}_{22}\text{O}_6\text{P}_2$	C_2H_5	CH_3	33	107–108 (0.1)	1.1490	1.4320	65.03	65.37
$\text{C}_{10}\text{H}_{24}\text{O}_6\text{P}_2$	C_2H_5	C_2H_5	41	120–121 (0.1)	1.1211	1.4310	69.72	70.00
$\text{C}_{11}\text{H}_{26}\text{O}_6\text{P}_2$	C_2H_5	C_3H_7	36	128–129 (0.1)	1.1201	1.4388	74.20	74.61
$\text{C}_{12}\text{H}_{28}\text{O}_6\text{P}_2$	C_2H_5	C_4H_9	78	136.5 (0.1)	1.1050	1.4419	79.02	79.23
$\text{C}_{10}\text{H}_{23}\text{ClO}_6\text{P}_2$	C_2H_5	ClC_2H_5	85	MP 78–79° (benzene)	—	—	—	—

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ACC NR: AP6033179

SUB CODE: 07/ SUBM DATE: 18Sep65/ ORIG REF: 006

Card 4/4

ABRAMOV, V. V.

"Mufil Cephalus (linne) Cuvier, a Mullet from the Lower Amur," Dokl AN SSSR,
85, No 2, 1952

MIRA Nov 1952

ABRAMOV, V.V.

Adaptation characteristics of adult salmon of the genus *Onchorhynchus* in fresh waters. Zool.zhur. 32 no.6:1198-1210 N-D '53. (MLHA 6:12)

1. Amurskoye otdeleniye Vsesoyuznogo Tikhookeanskogo nauchno-issledovatel'skogo instituta rybnogo khozyaystva i okeanografii. (Salmon)

ABRAMOV, V.V. inzh,

Coal losses in loading and unloading operations. Ugol' 34
no.4:56-57 Ap '59. (MIRA 12:7)
(Coal handling)

ABRAMOV, V.V., inzh.

Remote control temperature measurement in coal piles. Ugol' 36
no.3:60 Mr '61. (MIRA 14:5)
(Coal—Storage) (Thermometry)

ZELENTSKAYA, I.S., kand.tekhn.nauk; TSURKAN, I.G., kand.tekhn.nauk;
TSAREGRADSKIY, V.A., kand.tekhn.nauk; ABRAMOV, V.V., inzh.;
TOROPCHINOV, A.N., inzh.

Results of field and laboratory tests of the Volgograd lubricating
oil. Trudy TSNII MPS no.262:117-135 '63. (MIRA 16:10)

ALBAKOV, V. V.

"Water Supply and Sewerage in Petroleum Refineries," V.V. Albakov and Y.A. Karelin, Gostoptekhnizdat (State and Technical Publishing House of Petroleum and Mineral Fuel literature), Moscow-Leningrad 1948. (Vodosnabzheniye i kanalizatsiya neftepererabatyvayushchikh zavodov).

Summary - ATR 475-53, 30 July 53

470 K A M O V V. V.
KARELIN, Ya.A.; ABRAMOV, V.V., inzhener, retsenzent; TOLOCHKO, M.M.,
inzhener, retsenzent; KONTUSHKOV, A.M., redaktor

[Purifying industrial sewage of the petroleum industry] Ochistka
proizvodstvennykh stochnykh vod predpriatii neftianoj promysh-
lennosti. Moskva, Gos. nauchno-tekhn. izd-vo neftianoj i gorno-
toplivnoj lit-ry, 1953. 295 p. (MLRA 7:8)
(Petroleum industry) (Waste products)

ABRAMOV, V.V., inzh.

In the service of the petroleum industry. Stroi. pred. neft. prom.
3 no.3:17-18 Mr '58. (MIRA 11:6)

(Petroleum industry)

ABRAMOV, V.V.

The cost of industrial water-supply lines can be considerably
reduced. Vod.i san.tekh. no.8:4-9 Ag '59. (MIRA 12:11)
(Petroleum industry--Water supply)

ABRAMOV, V.V., inzh.

Design and construction of a radial water intake. Vod. i san.
tekhn. no. 6:1-6 Ja '62. (MIRA 15:7)

(Ik River--Intakes (Hydraulic engineering))

ABRAMOV, V.V.; MIKHAYLOV, P.A.; KIREYEV, A.A.; MALYSHEV, P.N.; DUPLINKO, Yu.V.

Mechanical methods of testing residual stresses in composition materials. Fiz.-khim. mekh. mat. 1 no.5:605-608 '65.
(MIRA 19:1)

1. Mashinostroitel'nyy institut imeni Chubarya, Zaporozh'ye.

ABRAMOV, V.V.; KANAVETS, I.F.

Anisotropy of the shrinkage of thermoplastic goods manufactured
by injection molding. Plast. massy no.2:23-26 '66. (MIRA 19:2)

L 47007-66 EWP(m)/EWP(j)/P IJP(c) NW/RM

ACC NR: AP6027282

(A)

SOURCE CODE: UR/0191/66/000/008/0043/0045

AUTHOR: Abramov, V. V.; Kanavets, I. F.

39
B

ORG: none

TITLE: Dependence of the cracking resistance of polyethylene articles on the injection molding conditions

SOURCE: ^vPlasticheskiy massy, no. 8, 1966, 43-45

TOPIC TAGS: pressure casting, polyethylene, crack propagation

ABSTRACT: The paper discusses the use of surface active agents in processing polyethylene for the purpose of preparing stable articles under atmospheric conditions and in noncorrosive media. By changing the technological parameters of the molding, one can change the supermolecular structure and decrease the internal stresses in the articles, thus increasing their resistance to cracking. A method was developed for evaluating the cracking resistance without the use of a load in order to check the conditions employed in the injection molding of polyethylene. In addition, the effects of casting temperature, injection pressure, mold temperature and subsequent annealing of the specimens obtained on the cracking resistance were determined. In unloaded articles with internal stresses, the cracks are propagated in the direction of orientation of the polymer macromolecules. A frozen orientation in the thin layer on the surface of the article, caused by a low mold temperature, decreases the cracking resistance.

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UDC: 678.742.2.06.019.133:678.027.74

L 47007-66

ACC NR: AP6027282

The latter is also substantially reduced by a processing temperature which causes a partial thermal degradation of the polymer. The action of surface active agents was found to be a sufficiently sensitive method for evaluating the optimum processing conditions. When heat treatment is used for removing stresses in the outer layers, the conditions employed should be such that the degree of crystallization of the polymer is not appreciably increased. Orig. art. has: 2 figures and 4 tables.

SUB CODE: 11/ ORIG REF: 007/ OTH REF: 005

Cord 2/2 vmb

ABRAMOV, V. V.

Screw-Cutting Machines

pipe threading at higher speeds. *Engl. stroi. tekhn.* 10, No. 6, 1953.

Monthly List of Russian Accessions, Library of Congress
June 1953. UNCL.

Abdrazov, V. V.

Dissertation: "Phase Stresses Occurring in Steel During Heat Processing." Cand Techn
Sci, Gor'kiy Polytechnic Institute, Gor'kiy, 1954. (Referativnyi Zhurnal-Akimiya,
No 12, Moscow, Jun 54)

SO: SOU 313, 23 Dec 1954

ABRAMOV, V.V., kandidat tekhnicheskikh nauk.

A plate method for measuring residual deformation due to heat treatment. Vest.mash.35 no.11:22-24 N '55. (MLRA 9:2)

(Deformations (Mechanics)--Measurement) (Metals--Heat treatment)

Abramov, V. V.

137-1957-12 23840

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 12, p 139 (USSR)

AUTHOR: Abramov, V. V.

TITLE: The Measurement of the Residual Stresses in Surfaces of Simple and Complex Bodies by the Strip Method (Izmereniye ostatochnykh napryazheniy na poverkhnosti tel prostoy i slozhnoy formy metodom plastiny)

PERIODICAL: V sb.: Novoye v liteyn. proiz-ve. Nr 2. Gor'kiy, Knigoizdat, 1957, pp 242-252

ABSTRACT: A new method is proposed for the determination of residual stresses (S) without the necessity of destroying the specimen. According to the method a strip 0.3-0.6 mm thick and composed of the same material as the test specimen is spotwelded to the latter in those areas where the S's are to be determined. The deformations of the strip are recorded, the first measurement being taken before and the second after the test strip had been detached. The measured elastic deformations are converted into stresses. By this method stresses arising during annealing or during cold working may be studied. In investigating stresses

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137-1957-12-23840

The Measurem't of the Residual Stresses in Surfaces (cont.)

in castings, the areas to be tested are left with cleats from which test strips are cut later. Formulae for the determination of the dimensions of the test strips were experimentally derived by means of measuring deformation of special samples under tension. The sensitivity of the strip method is considerably higher than that of the method of longitudinal turning of specimens. The test strip method permits the solution of certain problems relating to residual S's in transverse bending at points of stress concentration, which previously could not be solved by either theoretical or experimental means.

L. D.

1. Metals-Deformation-Test methods
2. Metals-Stress measurement
3. Stress analysis-Test methods

Card 2/2

SOV/124-58-5-6073

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 5, p 152 (USSR)

AUTHOR: Abramov, V.V.

TITLE: On the Calculation of Axial Stresses According to the
Kalakutskiy-Davidenkov Method (O vychislenii osevykh naprya-
zheniy po metodu Kalakutskogo-Davidenkova)

PERIODICAL: Tr. Gor'kovsk. politekhn. in-ta, 1957, Vol 13, Nr 4, pp
45-48

ABSTRACT: Bibliographic entry

1. Mathematics 2. Stress analysis

Card 1/1

SOV/124-58-5-5798

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 5, p 125 (USSR)

AUTHOR: Abramov, V. V.

TITLE: An Approximate Calculation Method for the Residual-stress Determination in Beams of Rectangular Cross Section Under Transverse Bending Flexure (Priblizhennyy raschetnyy metod opredeleniya ostatochnykh napryazheniy pri poperechnom izgibe balok pryamougol'nogo secheniya)

PERIODICAL: Tr. Gor'kovsk. politekhn. in-ta, 1957, Vol 13, Nr 4, pp 49-55

ABSTRACT: Assuming that, 1) the deformation beyond the yield point takes place without strain hardening, and that 2) a force applied at the center of a beam plastically deforms all of the central cross section, expressions for the residual-stress determination in different cross sections of a beam and at different points along its height are worked out. Auxiliary tables simplifying the calculations are given. Cases of repeated load application to an already deformed beam (a beam subjected to cold leveling, for example) are examined and it is demonstrated that a repeated load applied in the same direction and sense leads to an increase in the carrying capacity of a beam since it induces a favorable

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SOV/124-58 5-5798

An Approximate Calculation Method (cont.)

distribution of the residual stresses. An experimental confirmation of this deduction is described. Residual stress-distribution graphs for various cross sections and loads are given (it should be noted that the distribution lines are plotted as curves although the equations obtained are linear).

N. N. Davidenkov

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|--------------------|-----------------------|
| 1. Beams--Stresses | 2. Beams--Deformation |
| 3. Stress analysis | 4. Mathematics |

Card 2/2

ABRAMOV, V.V.

12-11-68
12-11-68

ABRAMOV, V.V., kand.tekhn.nauk; AGEYEV, D.V., doktor tekhn.nauk; prof.;
BANDAS, A.M., doktor tekhn.nauk, prof.; VERKHOVSKIY, A.V., doktor
tekhn.nauk, prof.; GOLINKEVICH, N.A., kand.tekhn.nauk, dots.;
DERTEV, N.K., doktor tekhn.nauk, prof.; MATTES, N.V., doktor tekhn.
nauk, prof.; RYZHIKOV, A.A., doktor tekhn.nauk, prof.; PASYNKOV,
O.N., otv.za vypusk

[New method for calculating thermal stresses] Novyi raschetnyi
metod vychisleniia termicheskikh napriazhenii. Gor'kii, 1958.
57 p. (Gorkiy.Politekhnikheskii institut. Trudy, vol.14, no.3)

(MIRA 13:7)

(Thermal stresses)

ABRAMOV, V. V., Doc Tech Sci -- (diss) "New methods of investigation and ^{control}~~direction~~ of ^{stresses}~~tensions~~ occurring ^{during}~~in~~ heat treatment of steel." Gor'kiy, 1958. 29 pp with drawings; 2 sheets of tables (Min of Higher Education USSR, Gor'kiy Polytechnic Inst im A. A. Zhdanov), 200 copies. ~~List~~ of author's works. pp 28-29 (14 titles) (KL, 35-58, 107)

-24-

SOV/129-58-12-4/12

AUTHOR: Abramov, V.V., Candidate of Technical Sciences

TITLE: ~~Formation of Residual Stresses in the Case of Surface~~
Hardening (Obrazovaniye ostatochnykh napryazheniy pri
poverkhnostnoy zakalke)

PERIODICAL: Metallovedeniye i Obrabotka Metallov, 1958, Nr 12,
pp 21 - 28 (USSR)

ABSTRACT: An attempt is made by the author to provide a more general and a more accurate method of calculation of the formation of residual stresses in surface-hardened components and to eliminate some of the existing divergences in the views expressed by Oding (Ref 1) and Golovin (Ref 2). An approximate method of calculation of the hardening stresses in a plate, proposed by the author, is used, which takes into consideration the phase transformations and the plastic deformations. The solution is applicable for any instant of the process of heat treatment and for any conditions of symmetrical heating or cooling of the plate. The new solution permits taking into consideration the influence of the change of the elasticity modulus E and of the extension coefficient β along the cross-section on the distribution of internal stresses, which is important when studying stresses in components which are

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SOV/129-58-12-4/12

Formation of Residual Stresses in the Case of Surface Hardening

subjected to surface heat treatment involving large temperature gradients. In this paper, a solution is given of the problem of calculation of the hardening stresses in a thin plate. This solution can be utilised in studying concrete production problems. The distribution of the temporary and residual temperature stresses was calculated for a plate with a thickness $2S = 200$ mm made of low-carbon steel containing 0.07% C and 0.27% Mn. For the solution of the problem it was assumed that in all the plates the surface temperature reaches instantaneously the value of 900°C and then remains unchanged for 45 sec (Curve a, Figure 1). Prior to surface heating, the temperatures of the individual plates were 20, 100, 400 and 600°C , respectively. The assumed values of the yield point, σ_{Tk} , the elasticity modulus E and the coefficient of linear expansion, β , are graphed in Figure 2. The temperature distribution along the cross-section of the plate during the process of cooling in water was determined by a grapho-analytical method - the method of finite differences. An average heating transfer coefficient of the water was assumed at:

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SOV/129-58-12-4/12

Formation of Residual Stresses in the Case of Surface Hardening

$$\alpha = 2\,500 \text{ kcal/m}^2 \text{ } ^\circ\text{C} ,$$

$$\lambda = 36 \text{ kcal/m.h. } ^\circ\text{C} .$$

Due to the very low carbon content, 0.07%, it is permissible to assume that during the cooling, practically no structural transformations take place. The calculated results are graphed in Figure 1 in the form of curves of distribution of the temperatures and the stress epures corresponding to these temperatures. The stress epures were graphed for the cases when the temperature at the surface equalled 900 °C (initial stress state prior to cooling), 390 - 440 °C, 150 - 180 °C, 80 - 100 °C and 20 °C (residual stresses). In figure 3, the curves are graphed of the changes of the stresses at the surface and in the centre of the plate as a function of the initial heating temperature and the initial temperature of the surface of the cooling plate. In figure 4, the epures of the temporary and residual stresses are graphed for a 40 mm thick plate of a steel containing 0.07% C and 0.27% Mn; the initial curves (prior to cooling) of the distribution of the temperature along the cross-section of the plate

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SOV/129-58-12-4/12

Formation of Residual Stresses in the Case of Surface Hardening

correspond approximately with those published by Golovin and Zamyatin (Ref 2). The conclusion of I.A. Oding that increase in the depth of the heated layer does not change the character of the stresses is correct as long as the heating of the core layers of the component is not affected. From the point of view of changing the sign of the stresses at the surface, the depth of heating is not the only important factor and, in this respect, the views expressed by Golovin and Zamyatin (Ref 2) are erroneous. Analysis of the obtained results indicates that for equal conditions of heating and cooling of the plates, the stress distribution will differ for the various steels. Therefore, the results of calculation of the thermal stresses obtained for commercially-pure iron cannot be extended to specimens of the same diameter produced from medium- and high-carbon steels. In the case of surface hardening by heating of the steel to the point of initial martensitic transformation $\gamma \rightarrow \alpha$ transformation will begin at the surface layers, which compensates to a considerable extent the contraction of the transient layer as a result of lowering of the temperature.

Card4/5

SOV/129-58-12-4/12
Formation of Residual Stresses in the Case of Surface Hardening

This phenomenon plays an important rôle in the formation of residual stresses and it is due to this phenomenon that the residual stresses in large components are distributed in the same way in the case of surface hardening as they are in the case of volume hardening (Ref 10). There are 6 figures and 10 references, 9 of which are Soviet and 1 English.

ASSOCIATION: Gor'kovskiy politekhnicheskiy institut
(Gor'kiy Polytechnical Institute)

Card 5/5

ABRAMOV, V.V., kand.tekhn.nauk, dots.

Investigating stressed state of tempered steel. Trudy GPI
13 no.8:67-71 '58. (MIRA 13:2)
(Steel--Testing)

ABRAMOV, V.V., kand.tekhn.nauk, dots.

Investigating the effect of the rate of cooling on the distribution of structural deformations along the cross section of a tempered solid. Trudy GPI 13 no.8:72-77 '58. (MIRA 13:2)
(Metals--Heat treatment)

S/124/60/000/006/031/039
A005/A001

Translation from: Referativnyy zhurnal, Mekhanika, 1960, No. 6, p. 153, # 7864

AUTHOR: Abramov, V.V.

TITLE: A New Calculation Method for Determining Thermal Stresses ²⁶

PERIODICAL: Tr. Gor'kovsk. politekhn. in-ta, 1958, Vol. 14, No. 3, 60 pp., 111. ✓

TEXT: The author attempts to solve the problem of determination of the temporary and residual stresses from hardening a bar (plate). It is assumed that the nonuniform mechanical and structural properties (strain modulus, linear dilation coefficient, yield point, and others) are symmetrically distributed with respect to the medium plane; symmetry of the heat field is presumed. Formulae are set up allowing the determination of σ_1 within and beyond the limits of elasticity from the condition of equilibrium of the stresses from the normal tensions σ_1 over the cross section of the bar and from the condition of joint strains of its longitudinal layers (according to the plane section hypothesis). The hardening is not taken into account. An one-dimensional stress state is supposed. An approximate procedure for estimating the effect of the cooling

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S/124/60/000/006/031/039
A005/A001

A New Calculation Method for Determining Thermal Stresses

rate on the distribution and magnitude of the strains is proposed. Some numerical examples of determining the thermal stresses are solved, and the analysis of the causes of the divergence of the results with those obtained by other authors is given. There are 55 references.

I.K. Snitko

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

ABRAMOV, V.V., dotsent, kand.tekhn.nauk

Definition of the theory of origination of residual stresses
caused by case hardening of steel. Izv.vys.ucheb.zav.;
mashinostr. no.1:142-146 '59. (MIRA 13:3)

1. Gor'kovskiy politekhnicheskii institut.
(Steel--Hardening) (Thermal stresses)

ABRAMOV, Y.V., kand.tekhn.nauk

Revised method for determining deformations of multilayer strips
caused by internal stresses. Trudy GPI 15 no.3:76-79 '59.
(MIRA 14:10)

(Deformations (Mechanics))

18.8600 2308, 1045, 1413

05136

S/137/60/000/008/007/009

A006/A001

Translation from: Referativnyy zhurnal, Metallurgiya, 1960, No. 8, pp. 281-282,
18622

AUTHOR: Abramov, V. V.

TITLE: Investigation of Impact Toughness of Two-Layer Heat Treated Steel

PERIODICAL: Tr. Gor'kovsk. politekhn. in-ta, 1959, Vol. 15, No. 3, part 1,
pp. 80-82

TEXT: Impact tests were made with specimens of two-layer steel grades "6XC" (6KhS) (hard layer) and "10" (soft layer), of 10 x 10 cross section without notches, having in the center an aperture of 5 mm in diameter. The specimens were subjected to oil-quenching from 850°C and tempering at 220°, 410° and 610° up to a hardness H_B 570-350 of the hardened layer. It was established that α_K values were higher if the hard layer was located in the zone of compressive stresses.

T. F.

Translator's note: This is the full translation of the original Russian abstract.

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AERAMOV, V.V.; KHARLAMOVA, T.I., red.; VERKHOVSKIY, A.V., tekhn.red.

[Investigation of stresses and displacements by means of the method of the dismemberment of a body] Issledovanie napriazhenii i peremeshchenii metodom raschlenaniia tela. Gor'kii, Politekhnikheskii in-t, 1960. Lecture 1.[General solution of the problem of calculating stresses and displacements in straight rods] Obshchee reshenie zadachi o vychislenii napriazhenii i peremeshchenii v priamykh sterzhniakh. 12 p. Lectures 2-4.[Tension and compression of a straight rod. Bending of a straight rod. Cold and hot straightening of rods]Rastiazhenie - szhatie priamogo brusa. Izgib priamogo brusa. Khodnaia i goriachaia pravka sterzhnei. 53 p. (MIRA 17:2)

ABRAMOV, V.V., kand.tekhn.nauk; DATCHIKOVA, L.K., inzh.; YANKIN, P.V., inzh.

Investigating the stressed state in the wall of a mold for flat
ingots considering phase transformations and plastic deformations.
Trudy GPI 16 no.1 pt.2:9-13 '60. (MIRA 14:4)
(Strains and stresses) (Founding)

ABRAMOV, V.V., doktor tekhn. nauk; KILEYEV, A.A., inzh.

Investigating stresses and shifts in homogeneous and nonhomogeneous bars subjected to elastoplastic deformations taking into consideration the strengthening of the material. Trudy GPI 17 no.3:5-14 '61. (MIRA 16:12)

S/137/62/006/010/020/028

A052/A101

AUTHORS: Abramov, V. V., Astrov, Ye. I., Tikhonov, N. N.

TITLE: Hardening stresses in multilayer steels

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 10, 1962, 130, abstract
101891 ("Tr. Gor'kovsk. politekn. in-ta", v. 17, no. 3, 1961,
24 - 31)

TEXT: The conditions and causes of crack formation at the water and oil hardening of multilayer steels were investigated. The investigation was carried out on 3-layer and 5-layer steel, 10 mm thick, produced by a hot rolling of packs made up of St10 and 45 steel plates with a different arrangement of layers. It has been found that samples of a 3-layer steel with an inside layer of St45, half as thick as the whole sample, crack across the inside layer when water-hardened. As the thickness of the inside layer increases to 0.7 or decreases to 0.3 of the total thickness, the tendency to the crack formation diminishes sharply, and at the thickness of the inside layer of > 0.8 or < 0.2 of the total thickness no cracks are observed. In 3-layer samples with an outside layer of St10 cracks do

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Hardening stresses in multilayer steels

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A052/A101

not form, independent of the layer arrangement and the hardening medium. In 5-layer samples with an outside and central layer of St45 cracks across the central layer appear only in the case when the thickness of the central layer is 3 - 4 times that of the outside layers. An analysis of the residual stress distribution has shown that, independently of the layer arrangement, tensile stresses are induced in St10 and compressive stresses in St45. At an equal number and arrangement of layers the water hardening contributes more to the crack formation than the oil hardening. This is explained by the difference of mechanical properties of layers. Curves of the temperature and stress distribution at the hardening of multilayer samples are presented.

M. Shapiro

[Abstracter's note: Complete translation]

Card 2/2

ABRAMOV, V.V., doktor tekhn. nauk; DATCHIKOVA, L.K., inzh.; LAZAREVA, O.M.,
inzh.

Investigating the stressed state of an ingot-mold wall depending
on the degree of freedom of bending deformation. Trudy GPI 17
no.3:32-40 '61. (MIRA 16:12)

ABRAMOV, V.V., doktor tekhn. nauk; GLYAVIN, Yu.V., kand. tekhn. nauk;
NATANZON, Ye.I., inzh.; RESHNIN, N.Ya., inzh.; UGLOV, K.M.,
inzh.; YANKIN, P.V., inzh.

Effect of the temperature field on the nature of warping of a
flat body after its temper hardening. Trudy GPI 17 no.3:
41-53 '61. (MIRA 16:12)

ABRAMOV, V.V., doktor tekhn. nauk, prof.; VERKHOVSKIY, A.V., doktor tekhn. nauk, otv. red.; KOZYULINA, R.M., red.

[Using the dissection method for calculating beams having extensive curvatures] Raschet brus'ev bol'shoi krivizny metodom raschleneniya tela; uchebnoe posobie. Gor'ki', 1962. 22 p. (MIRA 16:1)

1. Gorki. Politekhnikheskiy institut. Kafedra soprotivleniya materialov.

(Beams and girders)

ABRAMOV, V.V., doktor tekhn. nauk, prof.; ANTIKAYN, P.A., kand. tekhn. nauk, retsenzent; KUMANIN, V.I., inzh., red.; KOZLOV, A.P., red. izd-va; MODEL', B.I., tekhn. red.; DEMKINA, N.F., tekhn. red.

[Residual stresses and deformations in metals; calculations by the differentiation method] Ostatochnye napriazheniia i deformatsii v metallakh; raschety metodom raschleneniia tela. Moskva, Mashgiz, 1963. 354 p. (MIRA 16:8)
(Strains and stresses) (Metals--Testing)

ABRAMOV, V.V., doktor tekhn. nauk; RESHNIN, N.Yu. inzh.; POPEKOV, E.I., inzh.

Thermal residual stresses in plates. Trudy GPI 18 no.4:86-90 '63.
(MIRA 17:9)

ABRAMOV, V.V., doktor tekhn.nauk; ASTROV, Ye.I., kand.tekhn.nauk;
TIKHONOV, N.N., inzh.; RESHNIN, N.Ya., inzh.; LUPANOVA, O.K.,
kand.tekhn.nauk

Rated method of constructing diagrams for the tension of
bimetals. Trudy GPI 19 no. 1:23-32 '63. (MIRA 17:7)

ABSTRACT

AUTHOR: Abramov, V. V.; Yudovich, S. Z.; Borisenko, I. G.; Teterin, G. V.

TITLE: Mechanical properties of DI-1 steel at high temperatures

SOURCE: Fiziko-khimicheskaya mekhanika materialov, v. 1, no. 2, 1965, 221-224

TOPIC TAGS: metal mechanical property, steel, metallographic analysis

ABSTRACT: The mechanical properties of DI-1 steel are studied in the temperature range 100-1000°C. The results of the tests are presented in the form of graphs and tables.

where σ_{p0} is the compression yield stress and σ_{p1} is the tensile yield stress. The ratio σ_{p1}/σ_{p0} varies over the range 0.8-1.2. The results of the metallographic examination are also presented.

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L 62530-65

ACCESSION NR: AP5012656

2

to $\sigma = \frac{\sigma}{\sigma_0}$ is used as an index of the structural perfection and contamination of the metal. The experimental values of these indices are tabulated along with the basic mechanical properties of the metal. It was found that these formulas may be

ASSOCIATION: Mashinostroitel'nyy institut im. V. Ya. Shubara (Machine Building Institute)

RECEIVED: 15 May 64

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15 MAY 64

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ACCESSION NR: AP5012655

ENCLOSURE: 01

TABLE 1

Chemical composition of melts A and B

Melt	C	Mn	Si	P	S	Cr	Ni	Mo	W
A	0.18	0.28	0.32	0.018	0.010	15.45	2.64	0.46	0.35
B	0.18	0.22	0.28	0.016	0.011	15.07	2.66	0.42	0.12

MC
Card 3/3

L 2364-66 EWT(m)/EWA(d)/EWP(t)/EMP(k)/EMP(z)/EMP(b)/EWA(c) MJW/JD/HW/
 ACCESSION NR: AP5019947 UR/0133/65/000/008/0752/0753
 669.187.26

AUTHORS: Yudovich, S. Z.; Abramov, V. V.; Gabuyev, G. Kh.; Prantsov, V. P.;
 Smolyakov, V. F.; Sypko, A. V.; Travnikov, V. I.; Potapova, V. P.

TITLE: Effects of smelting and working methods on the properties of heat resistant
 stainless steel DI-1

SOURCE: Stal', no. 8, 1965, 752-753

TOPIC TAGS: stainless steel property, stainless steel smelting, hot rolling,
 forging/ DI 1 steel alloy, 20Kh15N3MA steel alloy

ABSTRACT: The effects of smelting and hot working methods on the properties of
 stainless steel DI-1⁴(20Kh15N3MA) were investigated. The metal was melted in 20-ton
 arc furnaces, poured into 2850 and 1000 kg ingots, part of which were hot rolled and
 part forged into 170- to 180-mm diameter rods. Part of the smelt was electroslag
 remelted and also forged or hot rolled into rods. During forging the ingots were
 heated to 1160-1180C, reduced to 200 x 200 mm blanks (850-900C), slowly cooled to
 100-150C, reheated to 1160-1180C for final forging into rods (final temperature,
 850-900C), and annealed at 660C. For hot rolling the blanks were placed at 750-
 800C in a recovery furnace. It was found that after remelting the oxide and sulfide
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L 2364-66

ACCESSION NR: AP5019947

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content in DI-1 dropped from ball 4 and 2 (coarse scale) to ball 1.0-1.5 and 0.5 respectively. The α -phase content also decreased as did the O_2 (by a factor of 2-3) and H_2 (factor of 2) contents. The properties of the arc smelted (DI-1) and resmelted (DI-1Sh) steels after heat treatment were $\sigma_B = 102.5 \text{ kg/mm}^2$, $\delta = 12\%$, $a_K = 6.0 \text{ kgm/cm}^2$ and 107, 16.5, and 6.2 respectively. The type of hot working method (forging or hot rolling) had no appreciable effect on any of the properties, but in both cases plasticity dropped sharply for working temperatures above 12000 (because of increased α -phase formation). Orig. art. has: 2 figures.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MM

NO REF SOV: 000

OTHER: 000

BVK

Card 2/2

ALRAMOV, Viktor Valerianovich; GRIDNOV, S.A., otv. red.;
ALYAB'YEV, N.Z., red.

[Using the method of the strength of materials in
studying strains and stresses] Issledovanie napriazhenii
i deformatsii metodom soprotivleniia materialov.
Khar'kov, Izd-vo Khar'kovskogo gos. univ., 1965. 62 p.
(MIRA 18:12)

ABRAMOV, V.V., inzh.

Operation of diesel locomotives under various temperature conditions.
Zhel. dor. transp. 40 no.9:51-53 S '58. (MIRA 11:10)
(Diesel locomotives)

ABRAMOV, V.V., inzh.

Removing carbon deposits from the pistons of a 2D100 diesel
motor. Elek.t tepl.tiaga. 4 no.6:22-23 Je '60.
(MIRA 13:8)
(Diesel engines--Maintenance and repair)

ABRAMOV, V.V., inzh.

Some characteristics of cold weather operation of diesel locomotives.
Elekt. i tepl. tiaga 5 no.10:11-12 0 '61. (MIRA 14:10)
(Diesel locomotives...Cold weather operations)

ABRAMOV, V.V., inzh.

Wear of the piston rings of the 2D100 diesel locomotive engine.
Vest.TSNII MPS 20 no.5:41-43 '61. (MIRA 14:8)
(Diesel locomotives)

ZELENETSKAYA, I.S., kand.tekhn.nauk; ABRAMOV, V.V., inzh.

Use of fuel and lubricants obtained from sour crude for diesel locomotives. Zhel.dor.transp. 43 no.2:41-44 F '61. (MIRA 14:4)
(Diesel fuels)

ZELENETSKAYA, I.S., kand. tekhn. nauk; ABRAMOV, V.V., inzh.

Use of fuels and oils from new deposits in the D50 diesel
engines. Energomashinostroenie 10 no.7:31-34 J1 '64.
(MIRA 17:9)

ABRAMOV, V.V.

Automatically controlled boilers with small evaporative capacity.
Prom. energ. 19 no.1:48-50 Jan 1964. (MIRA 17:2)

L 0613-67 EWT(m), EWT(L), EWT(K) JPF(G) JD/HM/L	
ACC NR: AP6032200	SOURCE CODE: UR/0133/66/000/010/0947/0947
AUTHOR: Yudovich, S. Z.; Abramov, V. V.; Sypko, A. V.; Frantsov, V. P.; Travinin, V. I.; Borisenko, I. G.	
ORG: none	45 41 B
TITLE: <u>Forgeability</u> of heat-resistant DI-1 stainless steel	
SOURCE: Stal', no. 10, 1966, 947	
TOPIC TAGS: ^{PHASE COMPOSITION,} heat resistant steel, stainless steel, martensitic steel, chromium nickel molybdenum steel, steel forging /DI-1 stainless steel	
ABSTRACT: The forgeability of heat-resistant <u>DI-1</u> stainless steel is affected by the following factors: chemical composition, amount of impurities, microstructure, surface condition of the ingot and phase composition. The decisive factor, however, was found to be the <u>alpha-phase</u> content. The amount of α -phase at 1200C varies between 3 and 8% (depending on the holding time) and between 9—20% at 1250C. The α -phase content affects negatively the elongation and reduction of area. To improve forgeability, the heating of ingots from 900C to 1200C should be done as fast as possible, the holding time at 1200C should not be less than 3 min per cm of cross section, and the absolute reduction should not be more than 25—30 mm per pass. The best chemical	
Card 1/2	UDC: 669.14.018.45

L 06193-67

ACC NR: AP6032200

composition was established as follows: carbon 0.19—0.21%, manganese 0.33—0.38%,
silicon 0.22—0.30%, chromium 15.0—15.5%. Orig. art. has: 2 figures.

SUB CODE: 11,13/ SUBM DATE: none/ ORIG REF: 001

Card 2/2 afs

ABRAMOV, V.V.; KANAVETS, I.F.; MAMEDOV, R.I.

Investigating the conditions of the injection molding of thermoplastics
with the use of composite molds. Plast. massy no.7:30-34 '65.

(MIRA 18:7)

KHOZOROV, Ye.I.; ABRAMOV, V.Ya.

Methods for the thermal calculation of a turbine engine. *Enim.*rom. 41
no.7:521-524 J1 '65. (MIRA 13:8)

ABRAMOV, V.Ya.; PEVZNER, I.Z.

Analysis of the performance of rotary calcination kilns in
alumina production. TSvet. met. 38 no.2:52 F '65.
(MIRA 18:3)

ABRAMOV, Ya., kand.med.nauk

For sampling. Voen.znan. 41 no.11:35 N '65.

(MIRA 18:12)

ABRAMOV, Ya.Ye.; ASHURKOV, Ye.D., kandidat meditsinskikh nauk, ispolnyayushchiy
obyazannost' direktora.

Causes of morbidity at two metallurgical plants. Sov.zdrav. 12 no.5:18-23
S-O '53. (MIRA 6:10)

1. Institut organizatsii zdavookhraneniya i istorii meditsiny im. N.A.
Semashko Akademii meditsinskikh nauk SSSR.
(Industrial medicine) (Medical statistics)

ABRAMOV, Ya. Ye., kandidat meditsinskikh nauk

Along the stormy Tseydon River. Zdorov'e 3 no.4:11 Ap '57
(MLRA 10:5)

(TSEYDON RIVER--DESCRIPTION)

ABRAMOV, Ya.Ye., kand.tekhn.nauk

In the Gorno-Altai Autonomous Province. Zdorov'e 5 no.5:9
My '59. (MIRA 12:11)
(GORNO-ALTAI AUTONOMOUS PROVINCE--MOUNTAINEERING)

S/028/62/000/003/001/005
D221/D302

AUTHOR: Abramov, Ya.Ye.

TITLE: Dimensional series of metal cutting machine tools

PERIODICAL: Standartizatsiya, no. 3, 1962, 14-17

TEXT: The basis of a parametric series is formed by the index of the 'density' effect of series φ , on the cost of machine tools manufacture. This factor indicates the economic advantages or losses of the producer due to the 'density' of the parametric series. The labor involved depends on the size of the batch of machine tools which is determined by the demand. The graph of produced workpieces of various sizes machines on these machines was assumed as the characteristic of the relative distribution of machines specialized in the production of the specified components. A transfer coefficient is introduced for calculation purposes. The area between the curve and the axis of abscissae is proportional to the quantity of the required machines of different sizes. The section

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Dimensional series of metal ...

S/028/62/000/003/001/005
D221/D302

of abscissae is divided into various parts proportional to the different values of φ for the corresponding variants of the machine tools. Integration provides the batch of each model, and the most economical variant is selected. The revision of ΠOCT (GOST) 872-41 on surface grinders with a circular table and a vertical spindle is then considered as an illustration. The graph of ball bearing manufacture is given. A comparison was made between the units manufactured according to GOST and grinders of Blanchard. Diameters of magnetic tables are tabulated. The data derived from the equations are also tabulated, thus indicating the relative distribution of machine tools for various sizes. In addition, a graph is plotted showing the changes in labor cost with regard to the batch size of surface grinders. The weight of a modern unit is given by $G = 0.52D^{1.4}$, where G is the weight of a surface grinder with a circular table and vertical spindle, in kg; D is the diameter of the table in mm. The value of G forms the basis for calculating the labor cost involved in their manufacture. The tabulated results demonstrate that the total labor for producing grinders in a given size model is minimum in the case of


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Dimensional series of metal ...

S/028/62/000/003/001/005
D221/D302

Blanchard units. The proposed size series of the new standard is more costly in manpower when unit manufacture is contemplated. However, if it is taken into consideration that the new series would be produced by the same factories which make grinders of other models, then the relative labor cost for both Blanchard and the new standard model will be reduced.

Card 3/3



ABRAMOV, Ya.Ye.

Precision norms for machine tools in technical specifications.

Standartizatsiia 26 no.8:32-33 Ag '62. (MIRA 15:8)

(Machine tools--Standards)

ABRAMOV, Ye.

The salting-in and salting-out phenomena in ideal systems.
Vest. AN Kazakh. SSR 21 no.9:16-26 S '65. (MIRA 18:9)

BIRYUKOV, N., inzhener-polkovnik; ABRAMOV, Ye., inzhener

Audible and luminous indicator of firing operations. Voent. vest. 41
no.7:116-118 J1 '61. (MIRA 1961)
(Shooting, Military--Equipment and supplies)

ABRAMOV, Ye.

Acid properties of esters. Izv.vys.ucheb.zav.; khim.i khim.tekh. 3
no.6:1031-1035 '60. (MIRA 14:4)

1. Kazakhskiy gosudarstvennyy universitet imeni S.M.Kirova i Institut
khimicheskikh nauk AN KazSSR.

(Esters)

ABRAMOV, Ye.

A collective agreement is a guide to action. Zhil.-kom.khoz. 12
no.8:14 Ag '62. (MIRA 16:2)

1. Otvetstvennyy sekretar' redaktsii gazety "Svarzovets".
(Socilaist competition) (Moscow--Rapid transit)

ABRAMOV, Ye.A.

Properties of solutions of low-substituted xanthogenates. Zhur.prikl.
khim. 29 no.3:384-393 Mr '56. (MIRA 9:8)
(Xanthic acid)

~~ABRAMOV, Ye. I.~~; YEROKHIN, N.G.; EFROS, V.V.; SARKISYANTS, Ye.A., redaktor;
PMSTRYAKOV, A.I., redaktor; GOR'KOVA, Z.D., tekhnicheskiy redaktor

[Disassembling and assembling the DT-24 tractor] Razborka i sborka
traktora DT-24. Pod red. E.A.Sarkisiantsa. Moskva, Gos.izd-vo
sel'khoz.lit-ry, 1957. 291 p. (MLBA 10:10)
(Tractors)

ACC NR: AT7000720 (N) SOURCE CODE: UR/0000/66/000/000/0169/0184

AUTHOR: Kolesnichenko, K. A. (Engineer); Abramov, Ye. I. (Engineer)

ORG: none

TITLE: Performance stabilization of some slide-valve-type hydraulic governors

SOURCE: Ukraine. Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya. Gidroprivod i gidropnevmoavtomatika (Hydraulic drive and hydropneumatic automation), no. 2. Kiev, Izd-vo Tekhnika, 1966, 169-184

TOPIC TAGS: hydraulic engineering, hydraulic equipment, hydraulic fluid, flow analysis, VALVE

ABSTRACT: The performance stabilization of some hydraulic governors by means of a specially designed slide-valve mechanism is discussed, and a method is proposed by which the reactive-flow intensity and the spring-resilience effects on the slide valve remain constant over the entire range governed. The method is based on introducing specially profiled slits to provide a regular dependability of their free-passage variations on the slide-valve stroke and on spring resilience. In designing governors according to the proposed method, the flow rate and pressure drop in the throttle slit under individual operation conditions must be known. The method is applicable under working conditions where the

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ACC NR: AT7000720

pressure drop is not necessarily related to a high increase in the flow rate. Performance stabilization is analyzed for a unidirectional action of the axial reactive-flow intensity, for the resilience of the spring, and for the case where they act in opposite directions. Wiring diagrams and examples of flow-rate checking devices and of overflow and main separators are demonstrated. Orig. art. has: 12 figures and 26 formulas.

SUB CODE: 13/ SUBM DATE: 29Jun66/ ORIG REF: 003

Card 2/2

ACC NR: AT7000721

SOURCE CODE: UR/0000/66/000/000/0185/0193

AUTHOR: Abramov, Ye. I.; Brotskiy, A. N.

ORG: None

TITLE: Some special problems in designing a hydraulic damper with linear characteristics

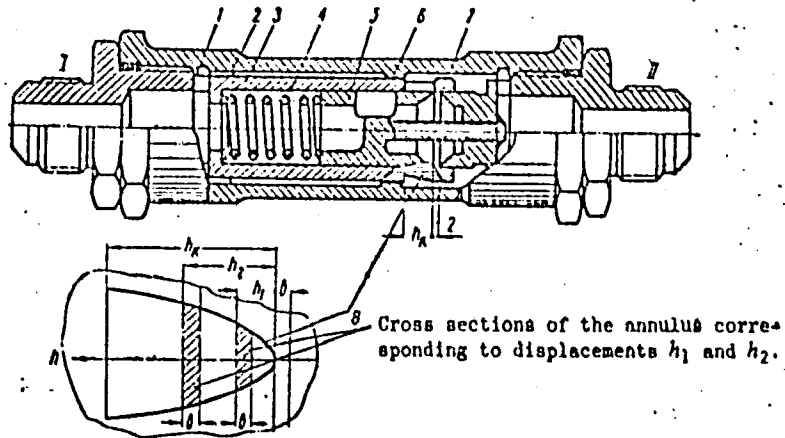
SOURCE: Ukraine. Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya. Gidroprivod i gidropnevmoavtomatika (Hydraulic drive and hydropneumatic automation), no. 2. Kiev, Izd-vo Tekhnika, 1966, 185-198

TOPIC TAGS: hydraulic device, vibration damping, shock absorber

ABSTRACT: The authors consider design of a hydraulic damper which gives linear characteristics $\Delta p = f(Q)$ over a wide range of working fluid temperatures where Δp is the pressure drop in the throttling device and Q is the rate of flow through the throttling unit. It is shown that a damper with linear characteristics which maintains stability with a change in the temperature of the working fluid requires a throttling unit with a variable cross sectional area which changes with the rate of flow. A diagram for a device of this type is shown in the figure. Sleeve 3, slide 5 and spring 4 are mounted in valve housing 1. Band 2 in the housing is a guide and band 6 is a seal. On the lateral surface of the sleeve are slots shaped to give the

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ACC NR: AT7000721



1--housing; 2--guide band; 3--sleeve; 4--spring; 5--slide; 6--sealing band; 7--annular slot in the slide; 8--profiled slot in the sleeve; b --width of the annular slot; h --travel of throttling unit

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ACC NR: AT7000721

predetermined characteristics (linear characteristics require parabolic slots). The slide is made in two sections to give the annulus 7 with sharp edges to produce flow turbulence. When fluid is fed in direction I-II, the sleeve compresses the spring and moves with respect to the stationary slide, passing through the annulus whose length is limited by the lateral surfaces of the slots made in the sleeve. When the fluid flows in the opposite direction, the slide moves with respect to the stationary sleeve with completely analogous throttling action. It is shown that a change in the area of the throttling element according to a parabolic law gives linear damping characteristics. Various modifications of the device are given together with an example of design calculations. Orig. art. has: 11 figures, 1 table, 13 formulas.

SUB CODE: 13/ SUBM DATE: 29Jun66/ ORIG REF: 002

Cord 3/3

ABRAMOV, Yevgeniy Il'ich; SARKISYANTS, Ye.A., red.

[DT-24 and T-28 tractors] Traktory DT-24 i T-28. Moskva, Gos.
izd-vo sel'khoz.lit-ry, 1959. 245 p. (MIRA 13:8)
(Tractors)

ABRAMOV, Ye.M.

Designs of elastic couplings. TSoment 26 no.4:25-27 J1-Ag '60.
(MIRA 13:11)

(Couplings)

ACCESSION NR: AR4008227

S/0169/63/000/011/V011/V011

SOURCE: RZh. Geofizika, Abs. 11V77

AUTHOR: Abramov, Ye. P.; Sokolov, O. N.

TITLE: Experience in the use of sonar for the geologic mapping of ocean bottoms

CITED SOURCE: Sb. Geofiz. priborostr. Vy*p. 15. L., Gostoptekhizdat, 1963, 116-128

TOPIC TAGS: hydrography, Black Sea bottom deposit, sonar mapping, sea bottom sonar mapping, Azov Sea bottom deposit, sonar geologic mapping, ocean bottom sonar mapping, GEL-2 sounding device, sea bottom geologic structure, sea bottom stratigraphy

TRANSLATION: The Black and Azov Sea regions, promising from the standpoint of tideland oil and gas deposits, have recently been surveyed with a powerful modernized depth sounder to determine bottom deposit thicknesses and composition. A working model of the sounder used two deep-water sounding devices of the GEL-2 type. The equipment was placed at a depth of 0.8 m on a 200-ton diesel schooner

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ACCESSION NR: AR4008227

(maximum load line depth -- 2.85 m, speed -- 9.5 knots). The radiation angle in the water was 11° . The experiments showed that in areas of the bottom with exposed Tertiary clay-sand deposits, the geological cross-section may be determined to a depth of 20-30 m by this method. The sounding sections show good correlation with the geological ones. The strong shielding effect of modern deposits even of small thickness (several tens of centimeters in the case of sand) is noted. The method is considered promising when used in conjunction with aerophotogeological surveying techniques. Yu. Alekseyev.

DATE ACQ: 09Dec63

SUB CODE: AS

ENCL: 00

Card 2/2

- [illegible]

ABRAMOV, Yu. A., inzh.; PROSKURYAKOV, A. V., kand. tekhn. nauk, docent

Using mathematical methods in planning operations for the
production of a wide range of articles. Vest. mashinostr.
45 no. 7:74-77 31 '65. (MIRA 18.10)

S/141/60/003/006/02 /025
E192/E382

9.2130

AUTHOR: Abramov, Yu.A.

TITLE: Fluctuations of an Oscillator Whose Tuned Circuit
Contains an Inductance with a Ferrite Core

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy,
Radiofizika, 1960, Vol. 3, No. 6, pp. 1130-1132

TEXT: It is known that during the periodic remagnetisation of a ferromagnetic core in a coil, a fluctuation e.m.f. is produced. This type of noise was investigated by a number of authors (e.g. Ref. 1). It is therefore to be expected that the same effect will be observed in a coil provided with a ferrite core. The problem was investigated experimentally and the spectrum of the amplitude fluctuations was measured over the frequency range extending from 130 to 2 000 c.p.s. The results of the experiments are shown in a figure. The author expresses his gratitude to A.A. Grachev for his interest in this work.

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Fluctuations of

S/141/60/003/006/01_/025
E192/E382

There are 1 figure and 3 Soviet references.

ASSOCIATION: Nauchno-issledovatel'skiy radiofizicheskiy
institut pri Gor'kovskom universitete
(Scientific Research Radiophysics Institute
of Gor'kiy University)

SUBMITTED: September 22, 1960

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ABRAMOV, Yu.A. (Kotovsk, Odes koy oblasti, ul.Spartaka, d.42)

Nephrectomy after preliminary ligation of the internal thoracic arteries in stenocardia. Nov. khir. arkh. no.12:77-78 D '61.

(MIRA 14:12)

1. Khirurgicheskoye otdeleniye (zav. - G.V.Yakimenko) Kotovskoy rayonnoy bol'nitsy, Odesskoy oblasti.

(ANGINA PECTORIS)

(KIDNEYS--SURGERY)

(THORACIC ARTERY)

ABRAMOV, Yu.A. (Kotovsk, Odesskoy oblasti, ul. Profinterna, d.7.kv.6)

Intra-arterial blood infusion in terminal states. Klin. khir.
no.10:73-74 0 '62. (MIRA 16:7)

1. Khirurgicheskoye otdeleniye (zav.-G.V. Yakimenko) Kotovskoy
rayonnoy bol'nitsy, Odesskoy oblasti.
(BLOOD—TRANSFUSION)

ABRAMOV, Yu.A.

Clinical aspects of nephroptosis. Vrach. delo no.11:77-79
N°63 (MIRA 16:12)

1. Khirurgicheskoye otdeleniye (zav. - G.V.Yakimenko) Kotovskoy
rayonnoy bol'nitsy Odesskoy oblasti. Nauchnyy rukovoditel' ra-
boty prof. A.M.Gasparyan.